

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

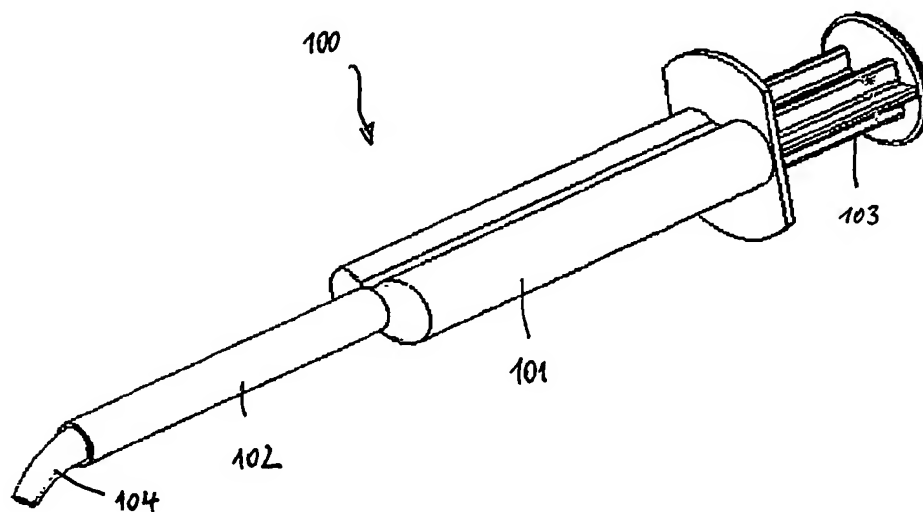
PCT

(10) International Publication Number
WO 2005/016170 A3

- (51) International Patent Classification⁷: **B05C 17/005**, A61C 9/00, A61B 17/00 (74) Agent: **VOSSIUS & PARTNER**; Siebertstrasse 4, 81765 München (DE).
- (21) International Application Number: PCT/EP2004/009100 (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 13 August 2004 (13.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 103 37 789.1 14 August 2003 (14.08.2003) DE (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **3M ESPE AG** [DE/DE]; Espe Platz, 82229 Seefeld (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **PEUKER, Marc** [DE/DE]; Brunnenstrasse 2, 86938 Schondorf (DE). **HOHMANN, Arno** [DE/DE]; Johann-Clanze-Strasse 105, 81369 München (DE). **PAUSER, Helmut** [DE/DE]; Metznerwiese 5, 86911 Diessen (DE).

[Continued on next page]

(54) Title: UNIT-DOSE SYRINGE FOR A MULTI-COMPONENT MATERIAL



(57) Abstract: The present invention relates to a unit-dose syringe comprising a static mixer for storage, mixing, and application of a multi-component material, preferably dental material. There is provided a unit-dose syringe (100) for a multi-component material comprising a cartridge (101) having a compartment (105, 106) for each component, a static mixer (112), a mixing tip (102) being integrally connected to the cartridge at the front end (107) of the cartridge, and receiving the static mixer, and a plunger (103) for each compartment of the cartridge, the static mixer comprising closure plugs (113) at its rear end for closing the outlet ends of the compartments.



Published:

— with international search report

(88) Date of publication of the international search report:

25 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.